2004–05. Among all races, coverage for blacks was lowest in 2003–04 at 38.6% (CI = 37.1%–40.0%) and declined by 39.1% in 2004–05, to 23.5% (CI = 22.3%–24.7%). Multiple logistic regression analysis confirmed the independent effects of these factors on vaccine availability.

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Editorial Note: Data from CAHPS provide insight into the effects of the fall 2004 influenza vaccine shortage on vaccination coverage for a population at low risk for complications from influenza. Overall, the limited availability of vaccine, the media attention to the problem, and calls from public health authorities to direct available supplies to persons at high risk appear to have resulted in decreases in vaccination coverage among MCO enrollees compared with the preceding season. These decreases were consistent across all eight geographic regions, suggesting that available supplies were distributed uniformly across the United States, although variations within smaller geographic areas might have been more extreme.

Respondents who were older or who reported poorer health status exhibited smaller relative reductions in vaccination coverage; this suggests that efforts to target vaccination to higher-risk members of the survey population were somewhat successful. However, CAHPS data indicate that substantial reductions in vaccination coverage occurred among commercially insured persons with fair or poor health status.

The findings of this report are subject to at least four limitations. First, CAHPS data are subject to recall bias regarding receipt of an influenza vaccination. Second, with a response rate of only 40%, the data are subject to nonresponse bias. Third, the commercially insured managed care population might differ from other populations of interest, thereby limiting the generalizability of the results. Finally, self-reported health status might differ from clinical assessments of health, thereby limiting the ability to determine whether survey respondents with fair or poor self-reported health status met the CDC definition of high risk for complications from influenza and were therefore members of a priority group for vaccination (*1,2*).

Further research into medical conditions associated with self-reported fair or poor health status might provide insight into the characteristics and health conditions of these persons, providing an additional tool for managing the public health response to future influenza vaccine shortages.

A simple self-assessment question about health status administered in a waiting room might help clinicians and public health authorities identify persons at high risk and target vaccine to priority groups during vaccine shortages.

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HIV Transmission in the Adult Film Industry — Los Angeles, California, 2004

In April 2004, the Los Angeles County Department of Health Services (LACDHS) received reports of work-related exposure to human immunodeficiency virus (HIV) in the heterosexual segment of the adult film industry in California. This report summarizes an investigation by LACDHS into four work-related HIV-transmission cases among adult film industry workers. The investigation was initiated April 20, 2004, and joined by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) on April 21, 2004, and by CDC on May 18, 2004. This investigation identified important and remediable gaps in the prevention of HIV and other sexually transmitted diseases (STDs) in the adult film industry.

The first identified case was in a man aged 40 years (index patient) who tested HIV-negative on February 12, 2004, and on March 17, 2004, through regular monthly testing of blood samples, but subsequently tested HIV-positive on April 9, 2004. HIV testing was performed through the Adult Industry Medical Health Care Foundation, a private nonprofit clinic in California, in a Clinical Laboratory Improvement Amendments (CLIA)-approved laboratory by using a polymerase chain reaction (PCR) test for HIV DNA (Amplicor™ HIV-1 Detection Kit, Roche Diagnostics); this clinic has provided voluntary monthly HIV testing to adult film industry workers since 1998. The nucleic acid testing method is approved only for screening blood products and not for individual human testing; however, the method has been used by the private nonprofit clinic for testing adult film industry workers because possible infection can be detected earlier than with standard serologic methods (i.e., enzyme-linked immunoassay [EIA] or Western blot). For blood transfusions, nucleic acid testing methods can detect HIV infection an estimated 10–15 days sooner than antibody-based tests; nucleic acid methods are highly sensitive but less specific than less costly

serologic assays and thus are well-suited for screening of blood products but not for definitive diagnosis (*1*).

On April 20, 2004, LACDHS initiated an investigation regarding the HIV-transmission events to assist with partner elicitation and notification and with medical referral for persons with newly diagnosed HIV infection. Cal/OSHA received an official request for an investigation from LACDHS on April 20, 2004. On April 29, 2004, LACDHS sought technical assistance from CDC to investigate concerns regarding HIV transmission.

During the time between his two negative tests, the index patient performed in film productions in Brazil, engaging in unprotected sexual acts. While in Brazil, he experienced an influenza-like illness that resolved before his return to California on or around March 10, 2004. According to LACDHS investigators, upon the return of the index patient to California, he participated in film productions in which he engaged in unprotected sexual acts with 13 female partners. Three of these 13 female partners subsequently tested HIV-positive by PCR after having tested HIV-negative during the preceding 30 days (attack rate: 23%). HIV PCR testing was conducted by the laboratory used by the nonprofit clinic; the HIV status of all four infected film workers was subsequently confirmed by PCR, enzyme-linked immunosorbent assay (ELISA), and Western blot testing at a separate laboratory.

According to field interviews with LACDHS and Cal/OSHA, two of the three HIV-infected female partners engaged in unprotected sex with the index patient during film production on March 24, 2004. Of these two female partners, one tested HIV-negative on March 20, 2004, and positive on April 13, 2004; the other tested HIV-negative on April 13, 2004, and positive on April 25, 2004. The third female partner engaged in unprotected sex with the index patient on March 30, 2004; she tested HIV-negative on April 12, 2004, and positive on May 5, 2004. During film production, all three of the infected female partners had engaged with the index patient in specific acts associated with increased possibility of mucosal tears. None of the other adult film industry workers or private partners with whom these three women had contact during the 30 days before their diagnoses subsequently tested HIV-positive. As of May 20, 2004, the index patient reported having had no sex partners outside of work since February 12, 2004. The person who was the source of HIV infection for the index patient is unknown.

The index patient and two of his three HIV-infected sex contacts subsequently provided whole blood samples to LACDHS, from which HIV DNA was sequenced at CDC. The third sex contact declined to provide a blood sample for sequencing. Using standard techniques, the HIV p17 region of *gag* and the C2V3C3 and gp41 regions of *env* from each of the three persons was amplified and sequenced by two different CDC laboratory scientists on separate days. All sequences were identical and supported the epidemiologic conclusion that the male index patient was the source of HIV infection and had transmitted HIV to these two women through sexual exposure.

After identification of the HIV outbreak cases, the organization operating the nonprofit clinic providing the HIV PCR testing identified a total of 25 first-generation partners (i.e., workers who had direct sexual contact with the four outbreak patients) and 36 second-generation partners (i.e., workers who had direct sexual contact with a first-generation partner). By June 30, 2004, a total of 24 of the 25 known first-generation partners had received HIV counseling and PCR testing at the nonprofit clinic after their exposure to a known HIV patient; of these 24 partners, 23 were tested at least 1 month after their direct sexual contact with an outbreak patient, and one was tested 3 weeks after the contact. All tested HIV-negative. The one first-generation partner for whom postexposure HIV test results were not available was a female partner of one of the infected female workers. In addition, 35 of 36 known second-generation partners had received HIV counseling and testing at the clinic as of June 30, 2004; among those tested, all were HIV-negative. The one second-generation partner for whom no postexposure testing data were available was a female partner of a male first-generation partner, who did receive postexposure HIV testing and was HIV-negative.

On June 4, 2004, Cal/OSHA opened an inspection of the producer(s) involved in these recent incidents of presumed workplace infection with HIV. On September 15, 2004, Cal/OSHA issued citations to two employers of some of the adult film industry workers with newly diagnosed HIV infection for failing to comply with the state's bloodborne pathogen standard (*2*), failing to report a serious work-related illness, and failing to prepare and follow a written occupational injury and illness prevention program.

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Editorial Note: The occurrence of HIV transmission in the adult film industry underscores the existence of serious risk for HIV infection in this industry and the need for fully informing workers of these risks and for employing all available safeguards to reduce transmission of HIV and other STDs. This industry includes an estimated 200 production companies in Los Angeles County, employing approximately 6,000 workers, of whom 1,200 are workers who engage in direct work-related sexual contact (Los Angeles County Economic Development Corporation, unpublished data, 2005). In the adult film industry, the increased potential for HIV/STD transmission is associated with basic practices, in that workers have multiple sex partners during short periods with whom they engage in frequent and often prolonged sexual acts. The risk for HIV/STD transmission is also greatly increased by lack of condom use. Production companies in the heterosexual segment of this industry have generally not required condom use for any type of sexual act.

Many producers and workers in the heterosexual segment of the adult film industry participate in a voluntary program of periodic HIV and STD testing, with results shared among workers and producers.* However, as demonstrated by the recent incidents of HIV transmission in this industry, screening alone is not adequate to prevent transmission of HIV or other STDs because infected persons can transmit these diseases for a period before their infection can be diagnosed. For HIV infection, the period after infection until virus is detectable by methods such as PCR is called the "eclipse period," and the period until antibodies to the virus are detectable by serologic methods is called the "window period." On the basis of the limited data available, the average eclipse period for HIV infection is estimated to last 10–15 days but can be longer (*1,3*). The index patient described in this report tested negative by HIV PCR twice during the 2 months before engaging in sex acts with the three women who subsequently became infected, including a negative test only 1 week before encounters with two of these women. This negative test likely occurred during the eclipse period when the index patient was able to transmit HIV but before the PCR test could detect the virus.

In addition to the testing program being inadequate as the sole source of protection from HIV transmission, the costs of testing are typically borne by the workers themselves. The cost burden of health services could cause some workers to reduce the range and frequency of HIV and STD screening or to avoid or delay pursuing vaccination for hepatitis B virus (HBV).

Similar episodes of HIV transmission have been identified previously in the heterosexual segment of the adult film industry. In addition to HIV, adult film industry work practices can result in transmission of other STDs. During June 2000–December 2001 (the most recently available prevalence data for this group of workers), before voluntary monthly STD screening was instituted, prevalences of chlamydial infection and gonorrhea among heterosexual adult film industry workers in California were 5.5% for males and 7.7% for females for chlamydial infection and 2.0% for both males and females for gonorrhea (*4*). By comparison, an analysis of a nationally representative sample of young adults aged 18–26 years during April 2001–May 2002 revealed prevalence of chlamydial infection among males and females to be 3.7% and 4.7% respectively, and, similarly, prevalence of gonorrhea to be 0.4% and 0.4%, respectively (*5*).

These instances of HIV transmission in the adult film industry underscore the hazards associated with unprotected sex among workers in this industry and the importance of implementing an effective health and safety program at adult film industry worksites and production agencies, as required by Cal/OSHA (*6*). In issuing citations, Cal/OSHA made the determination that existing occupational health and safety regulations apply to employers in this industry, including development and implementation of a written injury and illness prevention program and compliance with the Cal/OSHA Bloodborne Pathogens Standard (*6*). This standard requires that employees be protected from hazards associated with blood and other potentially infectious substances (including semen and vaginal fluid). Protections include measures such as simulation and use of condoms and other barriers where needed to prevent exposure. Other provisions include employee training and vaccination for HBV. The citations are currently under appeal to the Cal/OSHA Appeals Board. Cal/OSHA, LACDHS, the California State Department of Health Services, and other agencies are also currently collaborating to develop an appropriate model exposure-control plan (ECP) for this industry that is consistent with the existing Cal/OSHA Bloodborne Pathogens Standard (*2*) and the California Injury and Illness Prevention Standard (*7*).

Findings from this investigation emphasize the need to review current health and safety policies in the adult film industry and ensure that they are designed in accordance with Cal/OSHA requirements. This review should involve all of the various industry, employee, policy, and public health organizations. Workers in this industry need to be made aware of the risks associated with participation in various acts (*8*), to be able to participate in decision-making about their health

* Additional information is available at http://democrats.assembly.ca.gov/members/a42/pdf/afi.pdf.

and safety at work, and to benefit from prevention practices (*9*). These recommendations are consistent with existing CDC guidelines for health and safety practices and primary prevention of disease (*10*).

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Perceptions of Neighborhood Characteristics and Leisure-Time Physical Inactivity — Austin/Travis County, Texas, 2004

Regular physical activity improves quality of life and reduces risk for coronary heart disease, colon cancer, hypertension, diabetes, and overall mortality (*1*). Physical activity also has been associated with reduced symptoms of depression and greater independence (*1,2*). A sedentary lifestyle is associated with obesity (*1,3*). However, despite the health benefits of physical activity, 23.1% of adults in the United States report they do not engage in any leisure-time physical activity (*4*). Neighborhood environment (e.g., sidewalks and street lighting) (*5,6*), perceived trustworthiness of neighbors (*5*), and perceptions of neighborhood safety (*6,7*) all have been associated with levels of physical activity. During 2004, to assess the association between these factors and leisure-time physical inactivity in eastern Travis County, Texas, the local health department collected and analyzed data by using the methodology of the Behavioral Risk Factor Surveillance System (BRFSS). This report describes the results of that analysis, which indicated that persons who perceived their neighborhoods as less than extremely safe were more than twice as likely to have no leisure-time physical activity, and those who perceived their neighborhoods as not at all safe were nearly three times as likely to have no leisure-time physical activity. Public health agencies promoting physical activity in neighborhoods should consider how residents perceive their safety and design programs that specifically address those safety concerns.

Austin/Travis County Health and Human Services Department interviewed 1,635 adult residents of eastern Travis County, Texas, by using a random-digit–dialed telephone survey. Applying BRFSS methodologies and core questions, data were collected during a 3-month period in late summer and early fall of 2004. Leisure-time physical inactivity was defined as a response of "no" to the BRFSS core exercise question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" Self-reported neighborhood environmental characteristics were assessed by using questions from a module added to the 2004 Texas BRFSS. Questions included perceptions of neighborhood safety, presence of sidewalks, adequacy of streetlights, and perceived characteristics of neighbors. For the purposes of the survey, respondents were told that their neighborhoods were defined as the areas within one-half mile or a 10-minute walk from their homes.

The survey was conducted as part of the baseline data collection for the Steps to a HealthierUS program in an area of 20 contiguous postal codes in eastern Travis County with an approximate population of 460,000. Data were weighted to reflect the demographic composition of the area. The overall response rate for the survey was 51.8%, determined by using the Council of American Survey Research Organizations method (*8*). The association between leisure-time physical inactivity and perceived neighborhood characteristics was measured by using adjusted odds ratios (AOR) and 95% confidence intervals (CIs). Odds ratios were obtained by using logistic regression and were adjusted for sex, race/ethnicity (i.e., white non-Hispanic or nonwhite), age, and education level.

Overall, 26.6% of those surveyed were physically inactive during their leisure time. No statistically significant differences in prevalence existed by sex or age (Table 1). A higher prevalence of leisure-time physical inactivity was reported